

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/037,353	KAWAI, SUMIO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Nelson D. Hernandez	2612	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/24/2005.
2. ☒ The allowed claim(s) is/are 1,7 and 8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>8/4/2005, 6/15/05</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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## **DETAILED ACTION**

### ***Specification***

1. Examiner acknowledges changes made to the title. Changes on title are accepted.

### ***Response to Amendment***

2. Examiner acknowledges the amendments made on the claims received on August 24, 2005. Claims 1, 7 and 8 have been amended. Claims 2-6 and 9 have been cancelled.

### ***Allowable Subject Matter***

3. **Claims 1, 7 and 8** are allowed.
4. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest that the piezoelectric bodies include laminated piezoelectric bodies laminated on a surface of the optical device outside of an image formation light ray passing-through area of the optical device.

Akio, JP 07-151946 discloses a dust removal camera (See fig. 1) comprising: an image pickup optical system (Fig. 1: 3), which forms an optical image of an object; a photoelectric converting device (Fig. 1: 5) which converts the optical image to an electric signal; an optical device (Fig. 1: 2) disposed in the front of the image pickup optical system; and a vibration applying section (Fig. 1: 15) which generates a supersonic vibration on a surface of the optical device to remove dust adhered to the surface of the

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optical device (See translation, page 2, ¶ 0008; page 3, ¶ 0009-0013; page 4, ¶ 0016-0020; page 5, ¶ 0022).

Shaw, 4,441,796 teaches an optical device (Fig. 3: 44) for removing dust from the photosensitive element (Fig. 3: 42) of a camera or a projector, wherein said optical device for removing dust is disposed between the photosensitive element and the lens (Fig. 3: 62), and wherein a vibration transducer (Fig. 11: 234) for vibrating the optical device for removing dust generates a standing wave (See col. 10, lines 11-19) on a surface of the optical device to remove dust adhered to the surface of the optical device. (Col. 1, lines 6-12; col. 3, lines 38-59; col. 4, lines 29-61; col. 10, lines 11-19 and 44-53).

However, the teaching of Akio and Shaw either alone or in combination fails to teach or reasonably suggest that the piezoelectric bodies include laminated piezoelectric bodies laminated on a surface of the optical device outside of an image formation light ray passing-through area of the optical device.

### **Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 8:00 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nelson D. Hernandez  
Examiner  
Art Unit 2612

NDHH  
September 2, 2005



THUY TRAN  
PRIMARY EXAMINER